

all natural and artificial productions consist of elements, and of their combinations, according to definite laws of weight.

Such being the case, it follows that the various materials employed by the architect in construction, *et. gr.*, such as marble, stone, brick, cement, plaster, stucco, timber, iron, copper, tin, lead, zinc, glass, paint, and varnish, must present a vast fund of chemical information, and in the next paper it is proposed to give a very general account of the elements, and some of their most important compounds, and then to enter upon the particular investigation of the principal materials employed in construction.

IMITATION AND ARTIFICE IN FORM AND MATERIALS.

AMONGST the many debated questions in architecture, which, from their unsettled state, are the great obstacles to the knowledge of the theory, and to the perfection of the art, great difficulties surround that of the limit to the use of artifice and imitation in design. We could not, without forming some estimate of the value of imitations of materials, properly complete our series of papers on interior decoration, since it is in this department, that the inquiry is most frequently presented to us. Conscious of these difficulties, we still feel that such questions are seldom discussed without the publication of untenable theories, which, instead of elucidating the point under discussion, often mislead. It is some of these views, which it may be mainly our purpose to combat.—The subject may be treated as,—imitation of forms,—and imitation of materials, and each may be considered, as part of the general question of the propriety of imitation and artifice under all circumstances, and as regards the choice of fitting objects and means of representation. The objection to all imitation would sweep away such features as pediments to windows, and rustic work,—and, if consistent, sculpture, and every part in which a representation, and often the expression of a use, was hinted at.

It seems to us, that there are certain powers of sensibility, deeply implanted in human nature, which, if examined into, would afford a ready solution of many undecided questions of propriety in design. Amongst these are the dislike of every attempt at deception, and, consequently, the admiration of sincerity and truth. Such a principle is highly valuable in architecture. But, it is the tendency of most inquirers, to terminate their investigation with the perception of one admitted truth, and to discourse authoritatively with the assumption of that alone,—correlative facts, and principles of equal moment and influence, being disregarded. Architecture is by no means the only art or science, which has been led out of the direct line in its progress, by erroneous general conclusions from one particle of undoubted truth. Long before the time when Pope wrote—

"A little learning is a dangerous thing;
Drink deep, or taste not the Pierian spring,"

men forgot, as now, that several truths may be co-existent, and that a definite conclusion cannot, with propriety, be hastily made. In architecture, as, we believe, says Lord Aberdeen, there has been too great a love of generalizing.

So great, then, is this natural love of sincerity, that the failure of any deception is sure to recoil in disgust at the attempt; and to this extent do we deem, that the principle warrants us in condemning those so-called imitations of materials, which, except from their being put forward as substitutes, could never suggest the idea of any connection between themselves, and what they are by some persons understood, conventionally, to represent. The failure of the attempt, it is, which calls for rebuke; though the mere fact of an imitation of form or material, is not always to be understood as deception. When the material employed has advantages, it would not always be desirable to debar it from taking the appearance of another; and it does not follow, that any person will be deceived, or that such an intention was formed at the outset. The question simply is, whether one material may be so far used to represent another, that it shall not suggest the want of any qualities possessed by the original, or, whether the designer must lay aside a very large number of the obvious and constantly

recurring resources of his art. The objections against all imitations, if taken in the manner in which they are made, admit of no medium between the admission of those, which put forth no character of deception, and the exclusion of such as gilding, scagliola, and veneering. In the case of the first and last, the question would never be raised; but the supposed principle, which rejects a material or form, because it has certain qualities of another, and may so appear to some people, to represent what it is not, to be consistent, should admit of nothing but solid material. If we are free to choose between a column of Sienna marble, and one of scagliola not inferior in appearance, we might select the former, but certainly, for its value, its durability, or other reasons, often confounded, but properly to be discriminated from the question of art. Practically, indeed, we may prefer the marble, as not incurring the risk of failure through accident, or want of skill in workmanship. If we are informed that the material is marble, the knowledge of the mercantile value, or the durability, may enhance the pleasure; but is not this wholly irrespective of the pleasure derived from it as a work of art, and in itself so far unimportant, comparatively, as to be outweighed by the advantages—cheapness, perhaps—of the substitute?—The material imitated must also be such as might reasonably be supposed to be adapted to the situation, so that imitations, such as those of granite or bronze, will have to be carefully considered, for if these imitations be employed in any unusual place, they challenge only a closer inspection of their merit, as substitutes. Want of durability may often make us object, and properly so, to an imitation, when otherwise it might be perfectly allowable. The merit of the chief requisite of art is not entered into, the substitute being condemned apart from such considerations, and before they are broached.

The first question, then, which has to be asked, relative to any imitation, is:—What was the intention? if to convert one material to the appearance of another, the answer is at once decided by the success with which the intention has been carried out.

Middling art can no more be tolerated than middling poetry. In every work there must be a certain completeness. This characteristic it is, which distinguishes the sketch of a master, which may have but a small amount of labour, from the most pains-taken work of the tyro; in the former, nothing more was attempted than the materials, and the opportunity fulfilled.

As regards the use of imitation in forms, we deem that many of the objections, recently made to rusticated masonry, columns and pediments to windows, and some other matters of detail, are equally mis-conceived, and would, if founded on true data, apply to every species of architectural decoration. It could readily be shewn, we believe, that every ornamental feature in architecture, except perhaps mere sculpture, has taken its origin from some use, and it was this conviction that led us to assert in a former paper, that architecture would soon be reduced to the state in which it was with the Druids. The resemblance between the form and its original, we take to be often a chief element in its beauty. It has been an adopted principle in architecture, and correctly so, that in all ornament, it is well to preserve the semblance of utility. The theory, that all impressions of the beautiful originate in association, is doubtless something more than hypothesis, and, therefore, not to be forgotten before the interference with a long admitted principle of art.—But, we even doubt, whether the use of pediments over windows and doorways in interiors is to be altogether condemned, notwithstanding the arguments which are current against them. We find them in the works of some architects, whose practice has been considered to give authority, and who could not have failed to consider the objections to their use. They have been used, even by Sir William Chambers, in the interior of Somerset House. We should ourselves prefer to adopt a feature, in which the connection between the actual type and its derivative was more remote, in other words, that where there could not be the object of utility, the suggestion ought to be all that should find expression. The blocks under a cornice, may be of no use as supports, but

that appears to be the cause of placing them there, and the mind admits it as a reason for their presence. The labels over arches are of no use in protecting from the wet, at least internally, and the moulding would do equally well without a corbel, yet it is the suggestion of those uses, which is the chief cause of our satisfaction with them. As Reynolds has well observed, "by imitation only, variety, and even originality of invention, is produced," and a distinction should be made between imitation and deception, the first a most important part of the art, the second generally its enemy.

We have thus endeavoured to shew, that not the mere fact of the imitation, but rather, only the want of success, is matter for regret, according to the particular intention, and that imitations of materials are perfectly admissible, provided they are so good, as to awaken no sense of inferiority to their originals. We have already argued,* that imitations of pilasters, panels, and other decorations, in which painted decoration is substituted for relief, with intent to deceive, are mistaken such as we have alluded to; but that landscapes and other works in oil, water-colours, and fresco, are not to be objected to, since these can never be considered as in the place of realities. And also, that were these last intended as deceptions, it would lessen their value as works of mind, and class them rather with tricks of hand. Thus, for example, a figure painted upon the wall in neutral tint, having also a cast shadow, would be an imitation of the statue, the place of which it would supply, whilst a figure painted in colours, and without the shadow, like some of the figures in the centres of panels at Pompeii, would be a picture, complete in every respect, and perfectly admissible.

Even stucco might be tolerated, if it could be done in the best manner, so that the superior qualities of stone could not be thought of. But this degree of excellence is unfortunately seldom attainable now. The ancients employed stuccoes which had the hardness of marble, and were even used as protection to some kinds of stone, whilst we are compelled to superadd coats of paint, which destroy every resemblance to stone. The material in general is also very unsightly, notwithstanding the frequent addition of paint, which at length destroys all beauty of outline in ornaments and mouldings. It is true, that there are other objections to stucco, which indeed make us regret, that there should be such a material, from the facilities which it affords to the uneducated in art; but there could be no objection to it, if it were, and if it always remained, a perfect imitation, and if its use could be restricted to those who would make it subservient to design.

ROYAL INSTITUTE OF ARCHITECTS.

JAN. 25.—Mr. S. Angell, V.P., in the chair. Dr. Bromet presented an account of Union Church, and exhibited a sketch of a thirteenth century arch there, the architrave of which is wood. The mouldings of the archivolt were described as the dog-tooth, alternating with small rounds.

The honorary secretary read a description of the ancient Norman refectory in the bishop's palace at Hereford, containing some curious woodwork, of which there are few specimens left, belonging to the Norman period. This hall or refectory was originally 110 feet long and 55 feet wide, and was divided into three aisles by two ranges of wooden pillars and semi-circular arches; longitudinally it was in five compartments. Only half the roof remains, and yet is sufficient to shelter the principal apartments of the present episcopal residence. The interior, massive and grand, must have had a good effect; the pillars are sturdy, the arches and beams solid. It has been little noticed by topographers and antiquaries, partly because it can only be approached by the staircase of the episcopal residence. In date the writer considered, was soon after the Conquest. The spandril pieces of the roof, he thought, must have been cut out of timber four feet wide! Mr. Clayton afterwards described the Hall at Oakham, another curious Norman apartment, in three aisles, and four compartments longitudinally. The main arches, semi-

* Vide Vol. IV, p. 482.